various unsuccessful experiments with a view to ascertain the nature of this colouring principle, and the means of fixing it on stuffs. He found that the juice, expressed from the pounded leaves, did not produce the black colour, and that strong decoctions of the plant, impregnated with various chemical mordants, produced nothing more than a dull yellow, brownish or fawn colour. The reason of this is, that the colouring principle resides not in the sap, but in the *succus proprius* or peculiar juice of the plant, that this juice exists only in small quantity, and is wholly insoluble in water, a circumstance which contributes to the permanency of its colour, at the same time that it renders some other medium necessary for its solution.

With a view to ascertain the proper menstruum for this black substance, I subjected bits of cloth stained with it, to the action of various chemical agents. Water, at various temperatures assisted by soap and alkali, produced no change in its colour. Alcohol, both cold and boiling, was equally ineffectual. A portion of the cloth, digested several hours in cold ether with occasional agitation, was hardly altered in appearance. Sulphuric acid reddened the spots, but scarcely rendered them fainter. The fumes of oxymuriatic

acid which bleached vegetable leaves and bits of calico in the same vessel, exerted no effect on this colour.

Boiling ether is the proper solvent of this juice. A piece of linen spotted with the Rhus was immersed in ether and placed over a lamp. As soon as the fluid boiled, the spot began to grow fainter, and in a few minutes was wholly discharged, the ether acquiring from it a dark colour. The linen at the same time became tinged throughout with a pale greyish colour, acquired from the solution.

This nigrescent juice, in common with that of the Rhus vernix, has, perhaps, claims to be considered a distinct proximate principle in vegetable chemistry.

The leaves and bark are astringent to the taste, which quality appears to be occasioned by gallic acid rather than tannin. The infusion and decoction become black on the addition of salts of iron, but discover hardly any sensibility to gelatin.

A poisonous quality exists in the juice and effluvium of this plant, like that which is found in the Rhus vernix already described. It is said, that some other species of Rhus, such as Rhus pumilum and Rhus typhinum, possess the same

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